Patent claims:

1. Screening process for hydantoin racemases, characterised in that
   a) an enantioselective hydantoinase and
   b) the hydantoin racemase to be tested, which has a slower conversion rate compared with the hydantoinase under a), are allowed to act on
   c) a chiral hydantoin, which is used in the opposite enantiomerically enriched form to the selectivity of the hydantoinase, and
   d) the resulting N-carbamoyl-amino acid or the freed protons are detected in a time-dependent manner.

2. Process according to claim 1, characterised in that an aliphatically substituted hydantoin is used.

3. Process according to one or more of the preceding claims, characterised in that a hydantoinase from *Arthrobacter crystallopoietes* is used.

4. Process according to one or more of the preceding claims, characterised in that the ratio of the rate constants of the hydantoinase to the hydantoin racemase (k_{hyd}/k_{rac}) is > 2.

5. Process for the preparation of improved hydantoin racemases, characterised in that
   a) the nucleic acid sequence coding for the hydantoin racemase is subjected to a mutagenesis,
   b) the nucleic acid sequences obtainable from a) are cloned into a suitable vector and the vector is transferred into a suitable expression system, and

c) the resulting hydantoin racemases having improved activity and/or selectivity and/or stability are detected by means of a process according to one or more of claims 1 to 4 and isolated.

6. rec-Polypeptides or nucleic acid sequences coding therefor obtainable according to claim 5.

7. Use of the polypeptides according to claim 6 in the preparation of enantiomerically enriched N-carbamoyl-amino acid or amino acids.

8. Use of the nucleic acid sequences according to claim 6 in the preparation of whole cell catalysts.

9. Hydantoin racemase containing in position 79 an amino acid substitution with an amino acid selected from the group consisting of A, R, N, D, C, Q, E, H, I, L, K, M, F, P, S, T, Y and V.

10. Hydantoin racemases containing the consensus sequence FX_1DX_2GL (Seq. 1), wherein X_2 represents P or T and X_1 represents in position 79 an amino acid selected from the group A, R, N, D, C, Q, E, H, I, L, K, M, F, P, S, T, Y or V.

11. Isolated nucleic acid sequence coding for a hydantoin racemase selected from the group:
a) a nucleic acid sequence coding for a hydantoin racemase according to claim 9 and/or 10,
b) a nucleic acid sequence which hybridises under stringent conditions with the nucleic acid sequence coding for a hydantoin racemase according to claim 9 and/or 10 or with the sequence complementary thereto,
c) a nucleic acid sequence according to Seq.ID.No. 3, 5, 7 or 9 or a nucleic acid sequence having a homology of > 80% therewith,
d) a nucleic acid sequence containing 15 successive

nucleotides of the sequences Seq.ID.No. 3, 5, 7 or 9.

12. Whole cell catalyst containing a cloned gene for a hydantoin racemase according to claims 9 and/or 10.

13. Plasmids, vectors or microorganisms containing a nucleic acid sequence according to claim 9 and/or 10.

14. Primers for the preparation of the nucleic acid sequences according to claim 9 and/or 10 by means of PCR.